

propels the insects back to the beach, for, were it off-shore, it would blow the insects not in the range of the breakers out to sea.

Or, to put it another way: On any day of sunshine and warmth, when insects are mature, they fall into bodies of water in their flights, either through exhaustion or lured thereto by the dazzling reflection of the sun. They are found most abundantly when the wind is off-shore, because it blows them in. The controlling factor for their fall into the water may be phototropism or weariness, or both.

This conclusion is substantially the same that Dr. Needham arrived at in his 1917 paper,⁶ which has come to my notice after writing the preceding.

This phenomenon, of course, is one phase of that which leads to the finding of insects on shipboard at great distances from land.⁷

NOTES ON BEETLES OF THE GENERA *MELASOMA* AND *GONIOCTENA*.

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On June 13, 1914, Col. Wirt Robinson, Mr. Charles Schaeffer and the writer were on the top of Crow's Nest Mt., West Point, N. Y. On the northerly extension of the mountain we found a number of *Melasoma tremula* Fab. on the small poplars and willows growing in a depression in the otherwise generally rocky surface. On one of the willows we found *Melasoma interrupta* Fab. associated with *Melasoma tremula*. The writer discovered a male *interrupta* that was apparently in copulation with a female *tremula*, but as the insects had been disturbed we were not sure. They were, however, removed with a few of the willow leaves to a bottle, and on the evening of June 18 were found in copulation and examined with a glass to avoid any chance of error.

The *Melasoma interrupta* here mentioned is known as *Lina lapponica* Linn. in many collections, but in our native *interrupta* the

⁶ 1917, "The Insect Drift of Lake Shores," Can. Ent., XLIX: 129-137. This has a bibliography of eight titles bearing on the subject.

⁷ 1867, G. R. v. Frauenfeld, "Insectenleben zur See," K. K. Zool.-Bot. Ges. Wien, 1867, pp. 1-40 of separate.

sides of the thorax are light in color, whereas the *lapponica* of Europe has the thorax unicolorous, the same as in *tremulæ*. They, however, according to Crotch's table in the Proceedings of the Academy of Natural Sciences of Philadelphia, Vol XXV, p. 52, 1873, all belong to the same group being "Elongate, sides of thorax-thickened; claw-joint not dentate beneath." Crotch considered *interrupta* the same as *lapponica*, but this does not now appear to be the case.

The finding of a male and female of these two species in copulation in a state of nature, before they were confined in the bottle, is of much interest, and suggests an opportunity for future work in the genus *Melasoma*.

While *Melasoma interrupta* has long been known from a wide range of localities in the United States, *tremulæ* has apparently been spreading southward. Crotch says of the latter species in 1873, "it is very common in Europe, and has been sent from Hudson's Bay." The species was not mentioned in the second (1900) edition of the New Jersey List, but is recorded in that of 1910 from "Anglesea VI, 12, one specimen (Boerner)." The writer collected a single specimen at Newfoundland, N. J., July 6, 1907, and has also found it in the Adirondacks, June 22, and at West Point, N. Y., in June, 1912, and June, 1914. Other New York State specimens are from shore of Lake Ontario near Pulaski, Groton, Batavia, Honeoye Falls, Conesus Lake, and Rock City, Cattaraugus Co., all collected in June, and Queens, Long Island, without date. On Staten Island, N. Y., it has been collected at Watchogue, July 2, 1916. Also collected at Black Pond, Fairfax Co., Va., near the Potomac River, where two individuals were found June 21, 1914. In the collection of Mr. Charles W. Leng there are specimens from New Hampshire, and Aweme, Manitoba (N. Criddle).

As a matter of interesting distribution of a related species, the writer can record the capture of two specimens of *Gonioctena arctica* Mann., at Derrick City, Pa., near the N. Y. state line at Olean, Cattaraugus Co., on June 6, 1915. In the north it is more common and we have the species from Mt. Washington, N. H. In Mr. Leng's collection there are specimens from Sudbury, Ontario; Duluth, Minn., and Telegraph Creek, British Columbia.